

Sequence Listing

<110> Universitaet Leipzig

<120> Method and Means for the Determination of Defined States or Modifications in the Mucus of the Uterus or in the Epithelium of Other Organs

<130> 401P07PCT-US

<140> 10/559,406

<141> 2006-05-30

<150> PCT/DE04/01210

<151> 2004-06-04

<150> DE10325639.3

<151> 2003-06-06

<150> DE10325638.5

<151> 2003-06-06

<160> 15

<210> 1

<211> 15

<212> PRT

<213> artificial

<220>

<223> Epitope e-beta-9 (e-beta-hCG)

<400> 1

Thr	Cys	Asp	Asp	Pro	Arg	Phe	Gln	Ala	Ser	Ser	Ser	Ser	Lys	Ala
1				5					10					15

<210> 2

<211> 15

<212> PRT

<213> artificial

<220>

<223> Epitope beta-9 (t?hCG)

<400> 2

Thr	Cys	Asp	Asp	Pro	Arg	Phe	Gln	Asp	Ser	Ser	Ser	Ser	Lys	Ala
1				5					10					15

<210> 3

<211> 15

<212> PRT

<213> artificial

<220>

<223> Epitope e-beta-1 (e-beta-hCG)

<400> 3

Ser	Arg	Glu	Met	Leu	Arg	Pro	Arg	Cys	Arg	Pro	Ile	Asn	Ala	Thr
1				5					10					15

<210> 4

<211> 15

<212> PRT

<213> artificial
 <220>
 <223> Epitope beta-1 (t-beta-hCG)
 <400> 4

Ser Lys Glu Pro Leu Arg Pro Arg Cys Arg Pro Ile Asn Ala Thr
 1 5 10 15

<210> 5
 <211> 861
 <212> DNA
 <213> human
 <220>
 <223> beta-hCG beta-7 cDNA-Sequenz
 <400> 5

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actgagtctc	agaggtcact	tcaccgtggg	ctccgcctca	tccttggcgc	tagaccactg	180
aggggagagg	actgggggtgc	tccgctgagc	cactcctgtg	cctccctggc	cttgtctact	240
tctcgccccc	cgaagggtta	gtgtccagct	cactccagca	tcctacaacc	tcctgggtggc	300
cttgacgccc	ccacaaaccc	gaggtataaa	gccagggtaca	ccaggcaggg	gacgcaccaa	360
ggatggagat	gttccagggg	ctgctgctgt	tgctgctgct	gagcatgggc	gggacatggg	420
catccaagga	gatgcttcgg	ccacggtgcc	gccccatcaa	tgccaccctg	gctgtggaga	480
aggagggtctg	ccccgtgtgc	atcacggtca	acaccaccat	ctgtgccggc	tactgccccca	540
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gogatgtgcg	cttcgagtcc	atccggctcc	ctggctgccc	gcgcggcgtg	aaccccggtg	660
tctcctacgc	cgtggctctc	agctgtcaat	gtgcactctg	ccgccgcagc	accactgact	720
gcgggggtcc	caaggaccac	cccttgacct	gtgatgaccc	ccgcttccag	gcctcctctt	780
cctcaaaggc	ccctcccccc	agccttccaa	gtccatcccg	actcccgggg	ccctcggaca	840
ccccgatcct	cccacaataa	a				861

<210> 6
 <211> 861
 <212> DNA
 <213> human
 <220>
 <223> beta-hCG beta-6 cDNA-Sequenz
 <400> 6

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actgagtctc	agaggtcact	tcaccgtggg	ctccgcctca	tccttggcgc	tagaccactg	180
aggggagagg	actgggggtgc	tccgctgagc	cactcctgtg	cctccctggc	cttgtctact	240
tctcgccccc	cgaagggtta	gtgtcgagct	cactccagca	tcctacaacc	tcctgggtggc	300
cttgccgccc	ccacaaaccc	gaggtatgaa	gccagggtaca	ccaggcaggg	gacgcaccaa	360
ggatggagat	gttccagggg	ctgctgctgt	tgctgctgct	gagcatgggc	gggacatggg	420
catccaagga	gccacttcgg	ccacggtgcc	gccccatcaa	tgccaccctg	gctgtggaga	480
aggagggtctg	ccccgtgtgc	atcacggtca	acaccaccat	ctgtgccggc	tactgccccca	540
ccatgacccg	cgtgctgcag	ggggtcctgc	cggccctgcc	tcagggtggtg	tgcaactacc	600
gogatgtgcg	cttcgagtcc	atccggctcc	ctggctgccc	gcgcggcgtg	aaccccggtg	660
tctcctacgc	cgtggctctc	agctgtcaat	gtgcactctg	ccgccgcagc	accactgact	720
gcgggggtcc	caaggaccac	cccttgacct	gtgatgaccc	ccgcttccag	gcctcctctt	780
cctcaaaggc	ccctcccccc	agccttccaa	gtccatcccg	actcccgggg	ccctcggaca	840
ccccgatcct	cccacaataa	a				861

<210> 7
 <211> 861
 <212> DNA
 <213> human

<220>
 <223> e-beta-hCG ("endo" beta-6e) cDNA-Sequenz
 <400> 7

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actgagtctc agaggtcact tcaccgtggg ctccgcctca tccttggygc tagaccactg 180
aggggagagg actgggggtgc tccgctgagc cactcctgtg cctccctggc cttgtctact 240
tctcgcccc cgaagggtta gtgtcsagct cactccagca tcctacaacc tcctgggtggc 300
cttgmcgccc ccacaamccc gaggtatraa gccaggtaca ccaggcaggg gacgcaccaa 360
ggatggagat gttccagggg ctgctgctgt tgctgctgct gagcatgggc gggacatggg 420
catccargga gmyrcttcgg ccacggtgcc gccccatcaa tgccaccctg gctgtggaga 480
aggagggctg ccccggtgtgc atcacggtca acaccacccat ctgtgccggc tactgcccc 540
ccatgacccg cgtgctgcag ggggtcctgc cggccctgcc tcagggtggtg tgcaactacc 600

gcatgtgctg cttcgagtc atccggctcc ctggctgccc gcgcggcgtg aaccccgctg 660
tctcctacgc cgtggctctc agctgtcaat gtgcactctg ccgcgcgagc accactgact 720
gcggggggtcc caaggaccac cccttgacct gtgatgaccc ccgcttccag gcctcctctt 780
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ccccgatcct ccacaataa a
ccccgatcct ccacaataa a 861

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<210> 8
 <211> 165
 <212> PRT
 <213> human
 <220>
 <223> t-beta-hCG beta-5,beta-8,beta-3 (prehormone)
 <400> 8

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Met Glu Met Phe Gln Gly Leu Leu Leu Leu Leu Leu Leu Ser Met Gly
-20                      -15                      -10                      -5

Gly Thr Trp Ala Ser Lys Glu Pro Leu Arg Pro Arg Cys Arg Pro Ile
      -1  1                      5                      10

Asn Ala Thr Leu Ala Val Glu Lys Glu Gly Cys Pro Val Cys Ile Thr
      15                      20                      25

Val Asn Thr Thr Ile Cys Ala Gly Tyr Cys Pro Thr Met Met Arg Val
      30                      35                      40

Gly Val Leu Gln Leu Pro Ala Leu Pro Gln Val Val Cys Asn Tyr Arg
      45                      50                      55                      60

Asp Val Arg Phe Glu Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val
      65                      70                      75

Asn Pro Val Val Ser Tyr Ala Val Ala Leu Ser Cys Gln Cys Ala Leu
      80                      85                      90

Cys Arg Arg Ser Thr Thr Asp Cys Gly Gly Pro Lys Asp His Pro Leu
      95                      100                     105

Thr Cys Asp Asp Pro Arg Phe Gln Asp Ser Ser Ser Ser Lys Ala Pro
      110                     115                     120

Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp Thr
      125                     130                     135                     140

Pro Ile Leu Pro Gln
                      145

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<210> 9
 <211> 165
 <212> PRT
 <213> human
 <220>
 <223> beta-hCG beta-7 (prehormone)
 <400> 9

Met Glu Met Phe Gln Gly Leu Leu Leu Leu Leu Leu Leu Ser Met Gly
 -20 -15 -10 -5

Gly Thr Trp Ala Ser Arg Glu Met Leu Arg Pro Arg Cys Arg Pro Ile
 -1 1 5 10

Asn Ala Thr Leu Ala Val Glu Lys Glu Gly Cys Pro Val Cys Ile Thr
 15 20 25

Val Asn Thr Thr Ile Cys Ala Gly Tyr Cys Pro Thr Met Met Arg Val
 30 35 40

Gly Val Leu Gln Leu Pro Ala Leu Pro Gln Val Val Cys Asn Tyr Arg
 45 50 55 60

Asp Val Arg Phe Glu Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val
 65 70 75

Asn Pro Val Val Ser Tyr Ala Val Ala Leu Ser Cys Gln Cys Ala Leu
 80 85 90

Cys Arg Arg Ser Thr Thr Asp Cys Gly Gly Pro Lys Asp His Pro Leu
 95 100 105

Thr Cys Asp Asp Pro Arg Phe Gln Ala Ser Ser Ser Ser Lys Ala Pro
 110 115 120

Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp Thr
 125 130 135 140

Pro Ile Leu Pro Gln
 145

<210> 10
 <211> 165
 <212> PRT
 <213> human
 <220>
 <223> e-beta-hCG beta-6e (with Arg in Pos 2) (prehormone)
 <400> 10

Met Glu Met Phe Gln Gly Leu Leu Leu Leu Leu Leu Leu Ser Met Gly
 -20 -15 -10 -5

Gly Thr Trp Ala Ser Arg Glu Met Leu Arg Pro Arg Cys Arg Pro Ile
 -1 1 5 10

Asn Ala Thr Leu Ala Val Glu Lys Glu Gly Cys Pro Val Cys Ile Thr
 15 20 25

Val Asn Thr Thr Ile Cys Ala Gly Tyr Cys Pro Thr Met Met Arg Val

30	35	40
Gly Val Leu Gln Leu Pro Ala Leu Pro Gln Val Val Cys Asn Tyr Arg		
45	50	55
Asp Val Arg Phe Glu Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val		
	65	70
Asn Pro Val Val Ser Tyr Ala Val Ala Leu Ser Cys Gln Cys Ala Leu		
	80	85
Cys Arg Arg Ser Thr Thr Asp Cys Gly Gly Pro Lys Asp His Pro Leu		
	95	100
Thr Cys Asp Asp Pro Arg Phe Gln Ala Ser Ser Ser Ser Lys Ala Pro		
	110	115
Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp Thr		
	125	130
		135
		140
Pro Ile Leu Pro Gln		
	145	

<210> 11
 <211> 141
 <212> PRT
 <213> human
 >220>
 <223> beta-LH beta-4 (prehormone)
 <400> 11

Met Glu Met Leu Gln Gly Leu Leu Leu Leu Leu Leu Leu Ser Met Gly		
-20	-15	-10
Gly Ala Trp Ala Ser Arg Glu Pro Leu Arg Pro Trp Cys His Pro Ile		
	-1 +1	5
Asn Ala Ile Leu Ala Val Glu Lys Glu Gly Cys Pro Val Cys Ile Thr		
	15	20
Val Asn Thr Thr Ile Cys Ala Gly Tyr Cys Pro Thr Met Met Arg Val		
30	35	40
Leu Gln Ala Val Leu Pro Pro Leu Pro Gln Val Val Cys Thr Tyr Arg		
45	50	55
Asp Val Arg Phe Glu Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val		
	65	70
Asp Pro Val Val Ser Phe Pro Val Ala Leu Ser Cys Arg Cys Ala Pro		
	80	85
Cys Arg Arg Ser Thr Ser Asp Cys Gly Gly Pro Lys Asp His Pro Leu		
	95	100
Thr Cys Asp His Pro Glu Leu Ser Gly Leu Leu Phe Leu		
	110	115

<210> 12
<211> 10
<212> PRT
<213> artificial
<220>
<223> Peptide P1 (e-beta-hCG)
<400> 12

Cys Asp Asp Pro Arg Phe Gln Ala Ser Ser
1 5 10

<210> 13
<211> 10
<212> PRT
<213> artificial
<220>
<223> Peptide K1 (t-beta-hCG)
<400> 13

Cys Asp Asp Pro Arg Phe Gln Asp Ser Ser
1 5 10

<210> 14
<211> 11
<212> PRT
<213> artificial
<220>
<223> Peptide P2 (e-beta-hCG)
<400> 14

Ser Arg Glu Met Leu Arg Pro Arg Cys Arg Pro
1 5 10

<210> 15
<211> 11
<212> PRT
<213> artificial
<220>
<223> Peptide K2 (t-beta-hCG)
<400> 15

Ser Lys Glu Pro Leu Arg Pro Arg Cys Arg Pro
1 5 10 11